LATHAM & WATKINS

ATTORNEYS AT LAW IOOI PENNSYLVANIA AVE., N.W.

SUITE 1300

WASHINGTON, D.C. 20004-2505 TELEPHONE (202) 637-2200

FAX (202) 637-220I

FX PARTE OR LATE FILED

885 THIRD AVENUE, SUITE 1000 NEW YORK, NEW YORK 10022-4802 PHONE (212) 906-1200, FAX 751-4864

ORANGE COUNTY OFFICE

650 TOWN CENTER DRIVE. SUITE 2000 COSTA MESA, CALIFORNIA 92626-1925 PHONE (714) 540-1235, FAX 755-8290

SAN DIEGO OFFICE

ZOL "B" STREET SHITE 2100 SAN DIEGO, CALIFORNIA 92101-8197 EX PARTE OR LATE FILED 236-1234, FAX 696-7419

SAN FRANCISCO, OFFICE 505 MONTGOMERY STREET, SUITE 1900 SAN FRANCISCO, CALIFORNIA 94111-2562

PHONE (415) 391-0600, FAX 395-8095 SILICON VALLEY OFFICE 135 COMMONWEALTH DRIVE

MENIO PARK, CALIFORNIA 94025 PHONE (650) 328-4600, FAX 463-2600 SINGAPORE OFFICE

20 CECIL STREET, SUITE 25-02 THE EXCHANGE, SINGAPORE 049705 PHONE + 65-536-1161, FAX 536-1171

TOKYO OFFICE

INFINI AKASAKA, 8-7-15, AKASAKA, MINATO-KU TOKYO 107-0052, JAPAN PHONE +813-3423-3970, FAX 3423-3971

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FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETAFY une 23, 1999

MOSCOW 123056, RUSSIA PHONE + 7-095 785-1234, FAX 785-1235

NEW JERSEY OFFICE

ONE NEWARK CENTER, 16th FLOOR NEWARK, NEW JERSEY 07101-3174 PHONE (973) 639-1234, FAX 639-7298

> Ms. Magalie Roman Salas, Secretary Federal Communications Commission The Portals - 445 12th Street, S.W. TW-A325 Washington, DC 20554

> > Re:

ET Docket No. 98-206; DA 99-494; Diversified Communication Engineering, Inc., File Nos. 6001-EX-MR-1998, 0094-EX-ST-1999; Call Sign WA2XMY; EX PARTE

Dear Ms. Salas:

This is to advise you that on Tuesday, June 22, 1999, Merrill Spiegel, James Butterworth and Paul Anderson of DIRECTV, Inc. ("DIRECTV"), and the undersigned, also on behalf of DIRECTV, met with Dale N. Hatfield, Chief, Office of Engineering and Technology ("OET"), Bruce Franca, Deputy Chief, OET, James Burtle, Chief, Experimental Licensing Branch, OET, Tom Derenge, Spectrum Policy Branch, OET, Bruno Pattan, Technical Analysis Branch, OET, Douglas Young, Experimental Licensing Branch, OET, and Ronald Repasi, Chief, Satellite Engineering Branch, Satellite & Radiocommunication Division, International Bureau. The attached document, which outlines the issues discussed, was provided to the participants at this meeting.

An original and four copies of this letter and attachment are enclosed.

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LOS ANGELES OFFICE

PAUL R. WATKINS (1899 - 1973)

DANA LATHAM (1898 - 1974)

CHICAGO OFFICE

SEARS TOWER, SUITE 5800

CHICAGO, ILLINOIS 60606

PHONE (312) 876-7700, FAX 993-9767

HONG KONG OFFICE

SUITE 2205A, 22ND FLOOR

NO. 9 QUEEN'S ROAD CENTRAL HONG KONG

PHONE + 852-2522-7886, FAX 2522-7006 LONDON OFFICE

ONE ANGEL COURT

LONDON ECZR 7HJ ENGLAND

PHONE + 44-171-374 4444, FAX 374 4460

633 WEST FIFTH STREET, SUITE 4000 LOS ANGELES, CALIFORNIA 90071-2007 PHONE (213) 485-1234, FAX 891-8763

MOSCOW OFFICE

ULITSA GASHEKA, 7, 9TH FLOOR

LATHAM & WATKINS

Magalie Roman Salas, Secretary June 23, 1999 Page 2

Sincerely,

James H. Barker of LATHAM & WATKINS

Enclosure

Serious Interference Concerns



DIRECTV strongly disagrees with the statement in the May 26, 1999 letter that "[n]either DIRECTV nor Echostar has persuasively shown that DCE's proposed operations carry a substantial risk of causing harmful interference."

- Interference levels of the Northpoint system will exceed the level of interference recently agreed to at the ITU for NGSO FSS sharing with GSO BSS.
- The Commission's recent grant of an STA to Northpoint's affiliate,
 Diversified Communications Engineering, for tests of the Northpoint
 system in the Washington, DC area threatens DC-area DBS
 subscribers with both a complete loss of picture, and longer and more
 frequent loss of picture during rain.
- With tens of thousands of subscribers in the vicinity of the proposed test sites, interference is unavoidable – it is only a question of how much.

Interference Levels Agreed to by ITU for NGSO FSS Sharing with GSO BSS



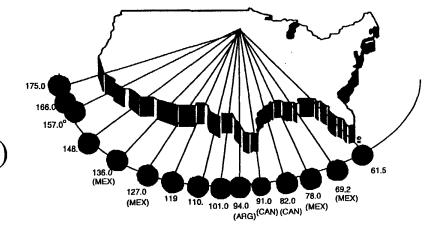
- All NGSO-FSS Systems Must Maintain:
 - < 10% increase in outage hours (total)
 - Req. C/I greater than 22 dB (steady state equivalent)
- Each NGSO FSS System Must Maintain:
 - < 2.9% increase in outage hours (per NGSO)
 - Req. C/I greater than 27 dB (steady state equivalent)

Protect BSS Reception from all Orbital Slots (Service to U.S.)



Examples of Operational & Potential DBS Satellites Serving U.S.

- 8 US Assignments
- 2 Canadian Assignments (82°, 91°)



- 1 Argentina Assignment (94°)
- 4 Mexican Assignments (69°, 78°, 127°, 136°)

Worst Case Antenna Gain Must Be Used to Protect BSS links (As Specified By ITU)



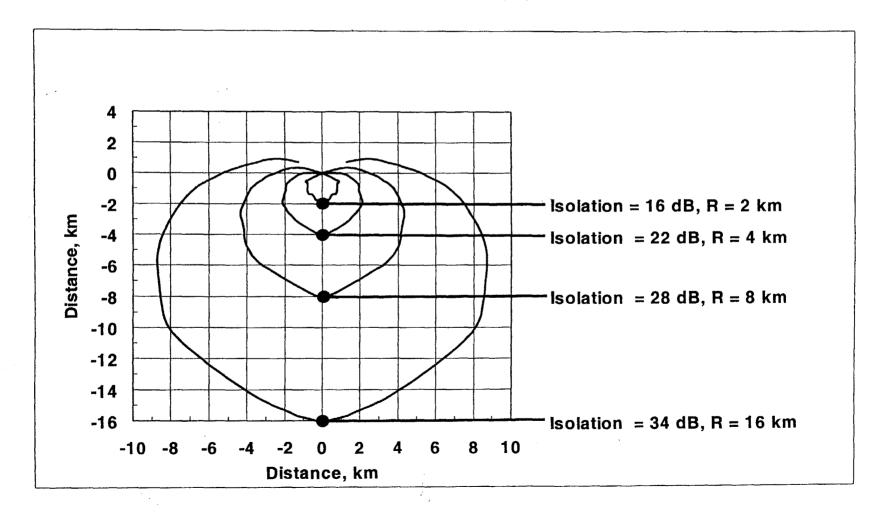
- Reception from any BSS orbital assignment must be protected.
- ITU-R Recommendation IS.847 provides the calculation method for determining victim earth station antenna gain to be used.
- Worst case antenna gain is the outcome of this procedure (not average gain, as alleged by Northpoint).
- 0 dBi for 45 cm parabolic offset fed antenna.

Simple View Of Generated Interference Levels



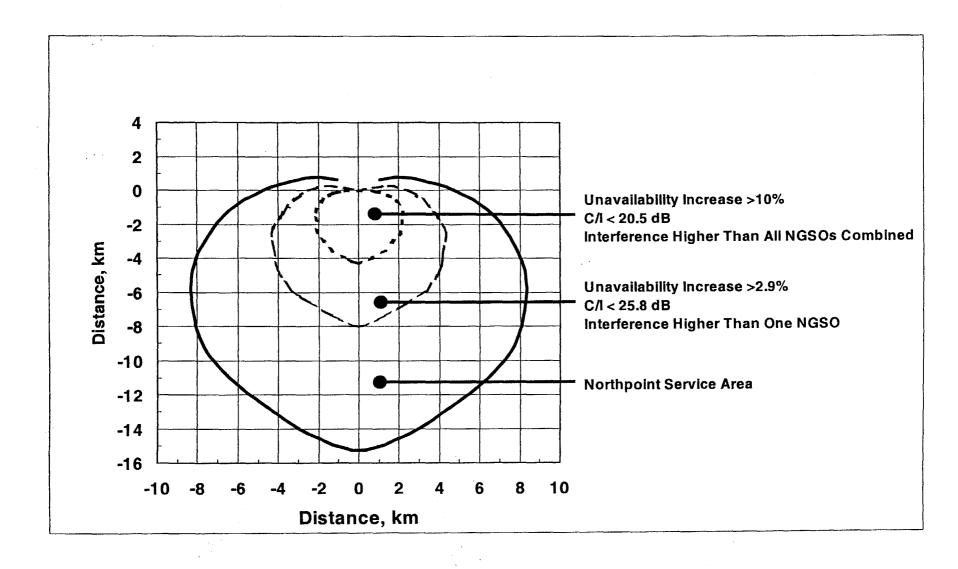
Assumptions:

- Northpoint Would Employ Receiving Systems With Performance Similar to DBS
- At Northpoint's Edge of Coverage, Interference Isolation (C/I) ~ DBS Antenna Discrimination ~ 34 dB



Interference Levels Using Northpoint System Parameters





Test Conditions



- DIRECTV believes that the current conditions governing the STA are wholly inadequate, first and foremost, to protect current DBS subscribers' service quality and, secondarily, to ensure accurate and meaningful test results.
- If the DC tests go forward -
 - they must be conducted in such a way that the risk to DC-area subscribers is minimized; and
 - they should be conducted in such a way that they provide meaningful data.
- Unless additional conditions are imposed on these tests, DIRECTV customers will not be adequately protected and the results will be based on insufficient or erroneous test data.

Test Conditions - CONTINUED



The following conditions must be imposed on the DCE STA in addition to, or modifying, those already contained therein:

- A maximum EIRP of 12.5 dBm should be mandated for test transmissions, a value that is consistent with previous filings by DCE, and is the level assumed in the DCE Engineering Report of April 5, 1999. Even at this reduced level, the interference levels inside of the -113.0 dBmW (red) contours shown in that report will be higher than the interference allowed from all NGSO FSS systems taken together, and much higher than allowed from any one NGSO FSS system.
- Without regard to actual signal coverage or interference levels, all subscribers residing within a 10-mile radius of each field test site are to have DBS signal reception protected at all times.

Test Conditions – Continued



- DIRECTV shall be granted unconditional access to the transmit and receive site(s) at any time the transmission is active, and prior to tests for purposes of verifying the test setup.
- DCE shall establish a dedicated line between DIRECTV and the DCE test sites at all times.
- DCE shall staff the test sites with FCC-licensed personnel of sufficient authority to immediately stop testing if notice of a complaint is communicated by DIRECTV.
- DCE shall be prohibited from contacting DIRECTV subscribers so as to permit DIRECTV to maintain its current customer relationships.

Test Conditions – Continued



- Extraordinary expenses incurred by DIRECTV Customer Service for troubleshooting interference complaints shall be reimbursed by DCE no later than 30 days after DCE receives a written itemization of such costs from DIRECTV.
- Notice to potentially affected DBS providers should be made no fewer than 21 days in advance instead of 5.
- Subscriber notices should: (i) be prepared with meaningful input by DBS providers; (ii) be published in the largest circulation newspapers in the D.C. area every day during the two week period prior to a test period; (iii) be prominently displayed and easily visible to DBS subscribers; and (iv) specify a DIRECTV number to call to report service interruptions.
- DCE should be required to bear cost of all notices and/or special customer service lines set up by a DBS provider.

Realistic Operational Parameters



The Northpoint system, at a minimum, should meet the following system requirements if the interference risk to DC-area subscribers can be minimized:

- DBS equipment is a consumer product that must be user-friendly and cannot be altered on a case-by-case basis. Thus, as a test condition, DCE should be prohibited from modifying or altering existing DBS hardware installations in order to mitigate Northpoint interference.
- DCE should be required to demonstrate the Northpoint system's operation using multiple cell sites if this is the intended operating configuration. These cell sites should be configured in a cascade or repeater system if this is the intended operating configuration.

Realistic Operational Parameters – Continued



- The Northpoint test signal must emulate an operational system as closely as possible, *e.g.*, test bandwidth should cover at least 24 MHz to demonstrate compatibility with existing DBS licensees.
- During testing, the Northpoint system's antenna pattern, power level and antenna height should be required to be realistic and designed for the intended operating configuration – not artificially designed to minimize interference for this test.
- If dynamic power control for rain fade or another purpose is proposed,
 DCE should be required to incorporate it in the test.

Realistic Operational Parameters – Continued



- DCE should be required to continuously record on a strip chart recorder the Northpoint system's transmit power during each actual programming day (*i.e.*, 24 hours/day) for the duration of the testing.
- DCE should be required to notify DIRECTV of all scheduled downtime at least 48 hours in advance, and to provide all anticipated and actual transmitted power levels to DIRECTV on a daily basis during testing at each transmitter site.